

GPTP-313xxx

155Mbps PIN-TIA Receiver With Pigtail Modules



Features

- ◆ High sensitivity
- ◆ Differential ended output
- ◆ 3.3 operation
- ◆ Trans-impedance amplifier with AGC
- ◆ RoHS Compliant Products Available

Applications

- ◆ 100Mbps application
- ◆ 155Mbps application

Ordering Information (Standard version ^{*Note1})

Part No.	Wavelength (nm)	Voltage(V)	Package	Pin Type	Connector
GPTP-313DAF	1260~1620	3.3	A	D	FC/PC
GPTP-313CDSA	1260~1620	3.3	B	C	SC/APC

*Note1: For more ordering information, please refer the nomenclature and contact EPOTOLINK sales.

Absolute maximum ratings

Parameter	Min	Typ.	Max	Unit
Storage Temperature	-40	25	85	°C
Operating Temperature	-40	25	85	°C
TIA Supply Voltage	-	-	6	V
PD Reverse Voltage	-	-	15	V
Operation Relative Humidity	-	-	85	%
Soldering Temperature / Time	-	-	260/10	°C/s

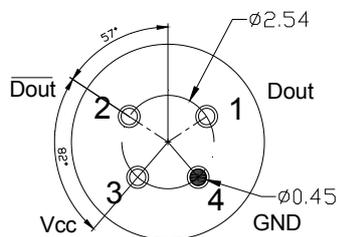
Electrical and optical characteristics

(Unless specified else, the specifications below are defined at Tc=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating Wavelength	λ	1260	-	1620	nm	-
Supply Current	I _{cc}	-	-	35	mA	No Loads
TIA Supply Voltage	V _{cc}	3.0	3.3	3.6	V	$\lambda=1310$ nm
Saturation Power	P _{sat}	6	-	-	dBm	$\lambda=1310$ nm
Small-Signal Bandwidth	BW	115	-	-	MHz	at -3dBm
Sensitivity		-	-36	-35	dBm	$\lambda=1310$ nm, 155Mbps, BER=10 ⁻¹⁰ @ PRBS=2 ²³ -1
Output Resistance	R _o	-	50	-	Ω	
Rise /FallTime	T	-	300	400	ps	20~80%

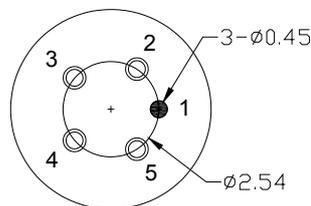
Pin Assignment ^{*Note2}

TYPE: C

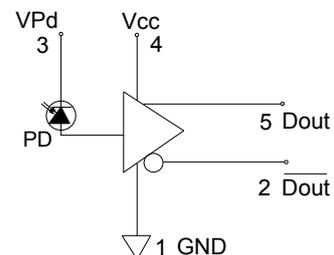


PIN-TIA-pin-C

TYPE: D

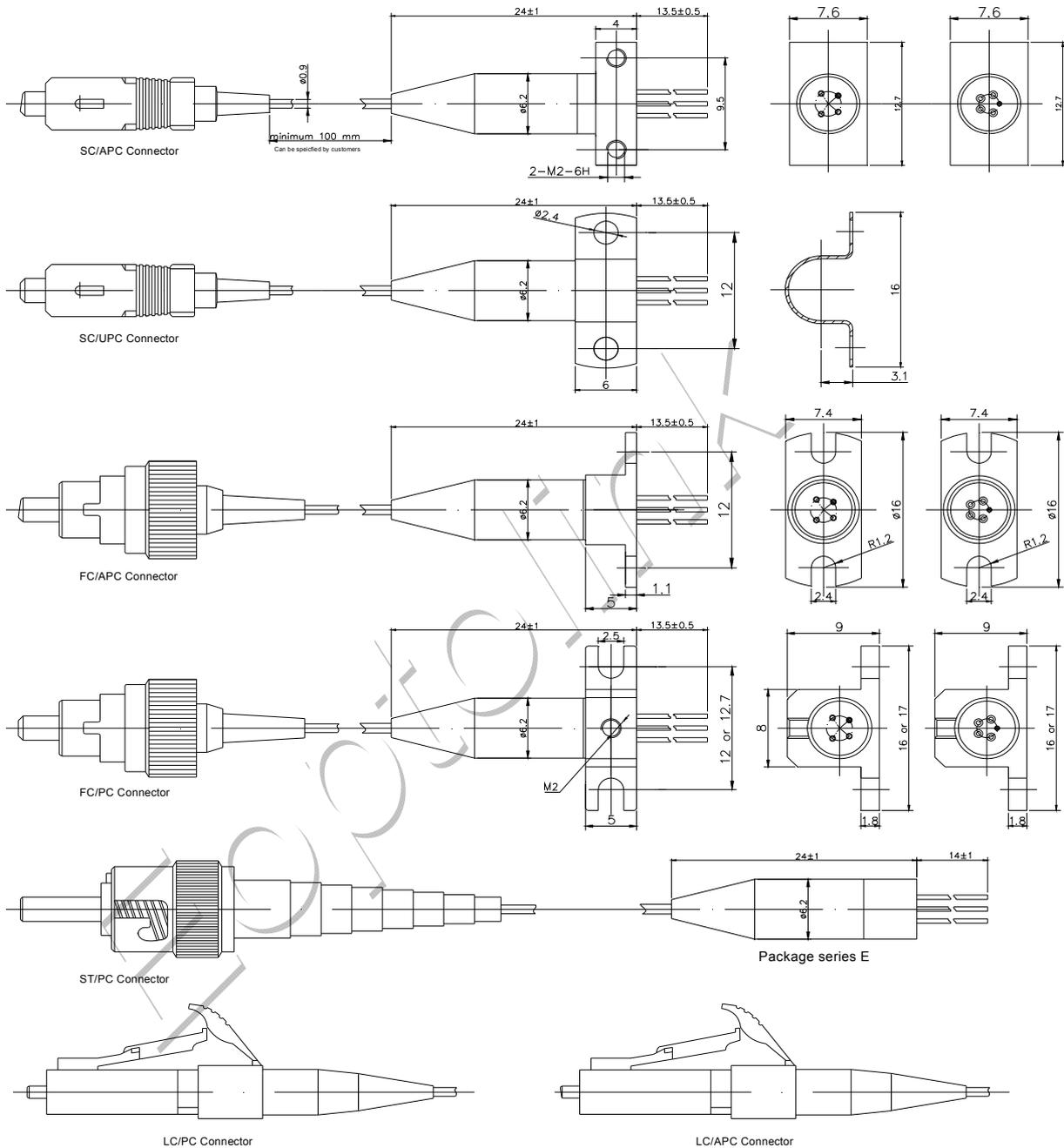


PIN-TIA-pin-D



Note2: Other Pin type can be customized.

Pigtail Package dimension *Note3, 4, 5



*Note3: PIN direction and laser mark can be customized. Pigtail is standard SM fiber; the length also can be customized.

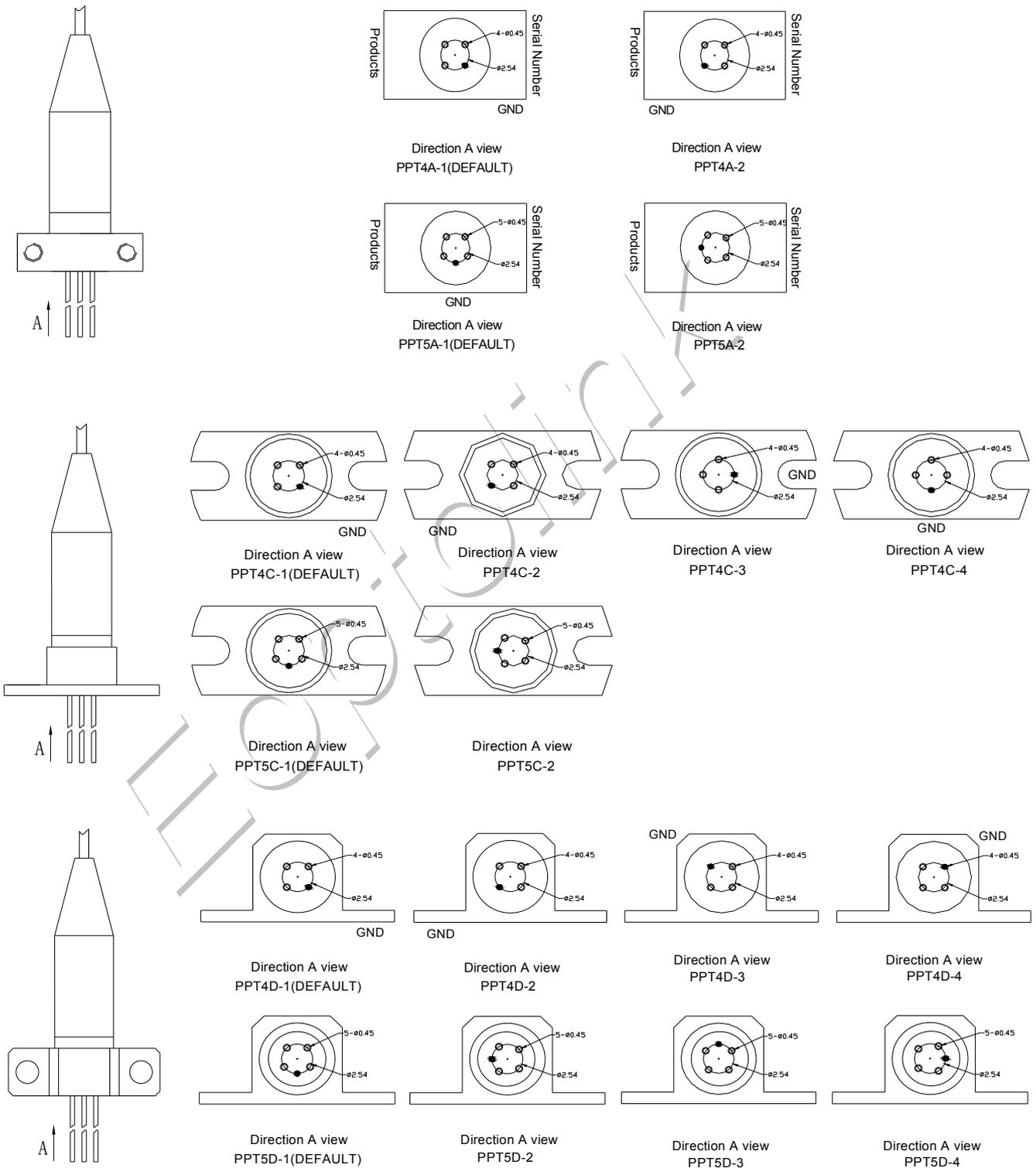
*Note4: For the package series D, the clamping rings dimensions (A) and drill size (B) are can be selected. The following types can be available. Please designate the detailed type while ordering the package series D.

Fixed card type	A(mm)	B(mm)
D	16	12
D-S	17	12.7

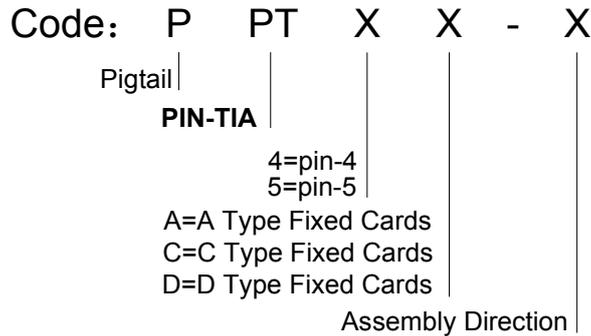
*Note5: For the package series B, the fix card is fixed by customer self. For the detailed information of fix

card of A, C, D package series, please refers the following graphs.

The direction of fix card

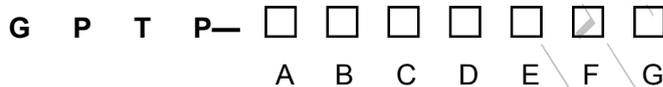


Nomenclature of assembly direction ^{*Note6}



*Note6: Please designate the code of assembly direction.

Nomenclature



Code	Parameter	Detailed Description			
A	Date rate	3=155Mbps			
B	Wavelength	1=1260~1620nm			
C	Voltage	3=3.3			
D	Pin Type	C= PIN-TIA-pin-C		D= PIN-TIA-pin-D	
E	Package series	A	B	C	E
F	Connector	F=FC/PC	S=SC/PC	T=ST/PC	SA=SC/APC
		FA=FC/APC	L=LC/PC	Blank=None	
G	Fiber Type	Blank=SM		M=MM	

Precaution

- (1) The modules should be handled in the same manner as ordinary semiconductor devices to prevent the electro-static damages. For safe keeping and carrying, the modules should be packaged with ESD proof material. To assemble the modules on PCB, the workbench, the soldering iron and the human body should be grounded.
- (2) Please pay special attention to the atmosphere condition because the dew on the module may cause some electrical damages.
- (3) Under such a strong vibration environment as in automobile, the performance and reliability are not guarant.

Obtaining Document

You can visit our website:

<http://www.eoptolink.com>

Or contact Eoptolink Technology Inc., Ltd. listed at the end of the documentation to get the latest documentation.

Revision History

Verision	Initiated	Reviewed	Approved	Revision history	Release date
Va-1	Yinchun.zhao	James.liu	Vincent.yu		2021-2-25
Va-2	Yinchun.zhao	James.liu	Vincent.yu	Update package size	2022.5.10

Notice:

Eoptolink reserves the right to make changes or discontinue any product or service identified in this publication, without notice, in order to improve design and/or performance. Applications that are described herein for any of the products are for illustrative purposes only. Eoptolink makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

Contact:

Add: No.127 West Wulian Street, Shuangliu District, Chengdu, 610213, P.R. CHINA

Tel: (+86) 028-67087999

Fax: (+86) 028-67087979

E-mail:sales@eoptolink.com

<http://www.eoptolink.com>